

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An air conditioner comprising an outdoor unit and an indoor unit provided with an indoor heat exchanger and an indoor expansion device, wherein the outdoor unit comprises:

a compressor ~~for compressing~~ which compresses a refrigerant;

an outdoor heat exchanger ~~for heat exchanging~~ which exchanges heat between a refrigerant and outdoors;

a four-way valve ~~adjacently arranged~~ located proximate to the compressor ~~for circulating~~ to circulate a refrigerant discharged from the compressor according to a heating cycle or a cooling cycle;

a refrigerant detouring path ~~for detouring~~ which detours a refrigerant discharged from the outdoor heat exchanger to the compressor at the time of a defrosting operation;

an outdoor expansion device installed in the middle of the detouring path, ~~for reducing~~ which reduces a pressure of a refrigerant which flows in the refrigerant detouring path; and

a heat exchanging device installed in the middle of the detouring path ~~for~~

heat-exchanging which directly exchanges heat between a refrigerant introduced from the outdoor expansion device and a refrigerant discharged from the compressor.

2. (Currently Amended) The air conditioner of claim 1, wherein the heat exchanging device comprises:

an inlet portion ~~for introducing which introduces~~ a refrigerant from the four-way valve;

a heat exchanging portion extending from the inlet portion with an expanded volume, ~~and for accommodating which accommodates~~ the refrigerant detouring path therein; and

an outlet portion ~~for discharging which discharges~~ a refrigerant which has passed through the heat exchanging portion to the outdoor heat exchanger.

3. (Original) The air conditioner of claim 2, wherein the refrigerant detouring path accommodated in the heat exchanging portion of the heat exchanging device is formed as a curved pipe.

4. (Currently Amended) The air conditioner of claim 1, wherein the refrigerant detouring path is connected to a first refrigerant path ~~for connecting which connects~~ the outdoor heat exchanger and the indoor unit by a first three-way valve, and connected to a second refrigerant path ~~for connecting which connects~~ the four-way valve and the indoor unit by a second three-way valve.

5. (Currently Amended) The air conditioner of claim 4, further comprising a receiver ~~for temporarily receiving~~ which temporarily receives a refrigerant and a drier ~~for removing~~ which removes moisture included in a ~~from~~ a refrigerant,

wherein the receipt of the refrigerant and the removal of the moisture occurs between the first refrigerant path and the first three-way valve.

6. (Canceled)

7. (Original) The air conditioner of claim 1, wherein the outdoor expansion device is an electron expansion valve.

8. (Currently Amended) An outdoor unit for an air conditioner comprising:

a compressor;

an outdoor heat exchanger ~~for heat exchanging~~ which exchanges heat between a refrigerant [with] and external air;

a four-way valve ~~adjacently arranged to~~ located proximate the compressor ~~for circulating~~ which circulates a refrigerant according to a heating cycle or a cooling cycle;

a first refrigerant path ~~for connecting~~ which connects the outdoor heat exchanger to an indoor unit;

a second refrigerant path ~~for connecting~~ which connects the four-way valve to the indoor unit;

a refrigerant detouring path, connected to the first refrigerant path by a first three-way valve and connected to the second refrigerant path by a second three-way valve ~~for detouring~~, which detours a refrigerant at the time of a defrosting cycle;

an outdoor expansion device installed in the middle of the refrigerant detouring path ~~for lowering~~ which lowers a pressure of a refrigerant which flows in the refrigerant detouring path; and

a heat exchanging device installed between the outdoor expansion device and the second three-way valve, ~~for heat-exchanging~~ which exchanges heat between a refrigerant discharged from the compressor and a refrigerant which has passed through the outdoor expansion device.

9. (Currently Amended) The outdoor unit of claim 8, wherein the heat exchanging device comprises:

an inlet portion ~~for introducing~~ which introduces a refrigerant from the four-way valve;

a heat exchanging portion extending from the inlet portion with an expanded volume ~~and for accommodating~~ which accommodates the refrigerant detouring path therein; and

an outlet portion ~~for discharging~~ which discharges a refrigerant which has passed through the heat exchanging portion to the outdoor heat exchanger.

10. (Currently Amended) The outdoor unit of claim 8, further comprising an accumulator ~~arranged~~ located between at an outlet of the four-way valve and an inlet of the compressor ~~for filtering which filters~~ a liquefied refrigerant.

11. (New) An air conditioner comprising:

an indoor unit provided with an indoor heat exchanger and an indoor expansion device; and

an outdoor unit comprising:

a compressor which compresses a refrigerant;

an outdoor heat exchanger which exchanges heat between a refrigerant and an outdoors;

a four-way valve located proximate to the compressor, which circulates a refrigerant discharged from the compressor according to either of a heating cycle or a cooling cycle;

a refrigerant detouring path which detours a refrigerant discharged from the outdoor heat exchanger to the compressor at the time of a defrosting operation;

an outdoor expander installed in the middle of the detouring path which reduces a pressure of a refrigerant which flows in the refrigerant detouring path; and

a heat exchanger installed in the middle of the detouring path, which directly exchanges heat between a refrigerant introduced from the outdoor expander and a refrigerant discharged from the compressor, said

heat exchanger comprising:

an inlet which introduces a refrigerant from the four-way valve;

a heat exchanger extension extending from the inlet portion with an expanded volume to accommodate the refrigerant detouring path therein so which direct heat exchange occurs between a refrigerant passing through the detouring path and a refrigerant introduced through the inlet portion; and

an outlet which discharges a refrigerant which has passed through the heat exchanging portion to the outdoor heat exchanger.

12. (New) The air conditioner of claim 11, wherein the refrigerant detouring path is connected to a first refrigerant path which connects the outdoor heat exchanger and the indoor unit by a first three-way valve, and connected to a second refrigerant path which connects the four way valve and the indoor unit by a second there-way valve.